

Name: _____ TP: _____

1) A triangle is located in the (x,y) coordinate plane. The vertices of triangle ABC are A(4, 1), B(-7, 2) and C(0, 5). What are the coordinates for the midpoint of AB?

Goal

(what's the goal? Re-state the question in your own words).

Find the midpoint of AB.

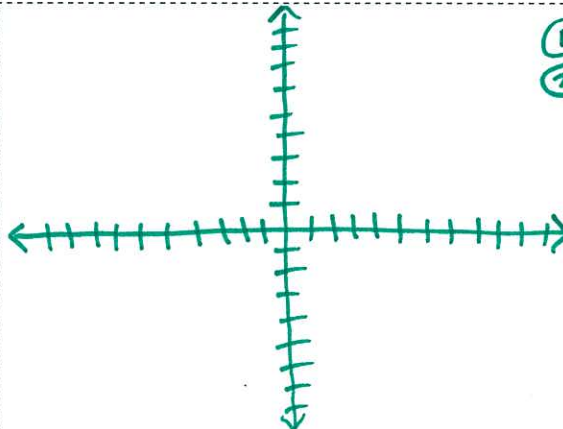
Required

(list the givens here!)

A(4,1)
B(-7,2)
C(0,5)
 $\triangle ABC$

Analysis

(what methods will you use? How will you solve this problem?
Make sure you draw a picture of the triangle!)



① Plot the points & label A, B, C
② Use the _____ formula.

→ Write out the formula:

Solve

(do the math!)

① Plug into _____ formula!

② What endpoints should you use? _____ & _____

Write answer in complete sentence:

Paraphrase

(check! Does your answer make sense?)

① Show how you checked your work! Explain how you can check your midpoint by plotting it on the coordinate plane.

2) A Opposite vertices of a rectangle in the standard (x, y) coordinate plane have coordinates (5, 37) and (17,7), respectively. What are the coordinates of the center of this rectangle?

Goal

(what's the goal? Re-state the question in your own words).

Find the...

Required

(list the givens here!)

- What shape? _____
- Opposite vertices means...? _____
- Opposite coordinates: _____ & _____

Analysis

(what methods will you use? How will you solve this problem? Make sure you draw a picture of the rectangle!)

- What would you use to find the center of the rectangle? _____
- Draw!

Formula:

Solve

(do the math!)

- Do the math!

Answer in completed sentence:

Paraphrase

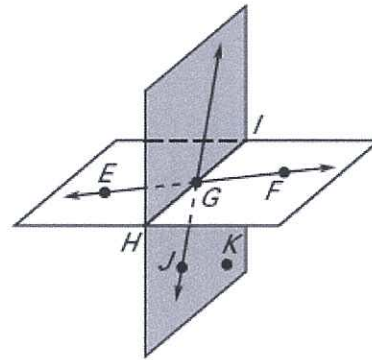
(check! Does your answer make sense?)

- Does the midpoint fall in the center? Look at the picture you drew in "Analysis."

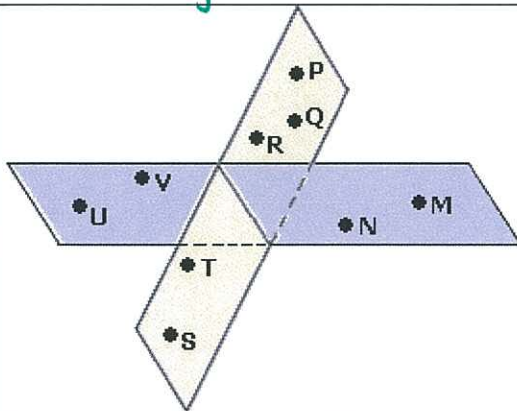
1. Use the diagram to decide whether the given statement is true or false.

- Points E, G, and F are collinear. _____
- Points E, G, and F are coplanar. _____
- Points H, I, and G are collinear. _____
- Points H, I, and J are coplanar. _____

"CO" = together!



= plane
 = line



2. Name at least 3 sets of 3 points in the figure above that are coplanar.

- EX A. U V M
 B. _____
 C. _____

3. If $AC = 35$, what is the value of MC ?

① Do you set them equal to each other?

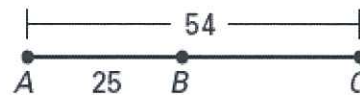
OR

② Do you combine like terms?



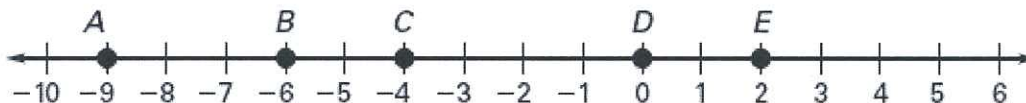
4. Find BC .

$AB + BC = ?$
 Finish the equation!



Unit 1 Review "Sho Nuff"

Use the number line below to answer questions 1 – 4.



1. What is the distance, in coordinate units, between points A and B?

A =

B =

$$\text{Distance} = |A - B|$$

2. What is the distance, in coordinate units, between points B and E?

3. How much longer is AD than BE ?

$$AD = |A - D| = \underline{\quad} \quad BE = |B - E| = \underline{\quad}$$

$$AD - BE = \underline{\quad}$$

4. How much longer is CD than DE ?